

of each dependent claim is not required, since dependent claims are patentable for at least the same reasons as the independent claims from which the dependent claims ultimately depend.

Patentability of Independent Claim 1

A significant difference exists between the recited subject matter and the cited art because the cited art does not analyze the sample *while the immobilized particles remain disposed on the surface*.

More specifically, the third subparagraph of independent Claim 1 recites (emphasis added):
*means for analyzing the spot of immobilized airborne particles **while the particles remain disposed on the regenerable solid collection surface** to determine if the spot of immobilized airborne particles represents a biological threat.*

In contrast, Danylewych-May teaches that sample particles are analyzed in gaseous form after being vaporized, such that the sample is analyzed while entrained in a flow of air or other gas (Danylewych-May, column 6, lines 41-44). Thus, Danylewych-May teaches that although particles are originally disposed on a substrate 45, that the particles are removed from the substrate prior to analysis, using heater 58 that is activated to vaporize and desorb a sample (Danylewych-May, column 6, lines 39-41). Thus, the particles in Danylewych-May *are not* analyzed while on the collection surface.

Accordingly, the rejection of independent Claim 1 as being anticipated by the Danylewych-May reference should be withdrawn. Because dependent claims include all of the elements of the independent claim from which the dependent claims ultimately depend, dependent Claim 7 is patentable for at least the reasons discussed above in regard to independent Claim 1, and the rejection of dependent Claim 7 as being anticipated by the Danylewych-May reference should also be withdrawn.

Patentability of Independent Claim 21

A significant difference exists between the recited subject matter and the cited art because the cited art does not teach measuring a biological signature while the particles remain deposited on the regenerable solid collection surface.

More specifically, the second step of independent Claim 21 recites (emphasis added):
*measuring a biological signature present in the particles comprising the spot, using a detector configured for sensing the biological signature of the particles, **while the particles remain deposited on the regenerable solid collection surface***

As noted above, the sample in Danylewych-May *is not* analyzed while on the collection surface. Accordingly, the rejection of independent Claim 21 as being anticipated by the Danylewych-May reference should be withdrawn. Because dependent claims include all of the elements of the independent claim from which the dependent claims ultimately depend, dependent Claims 24 and 33 are patentable for at least the reasons discussed above in regard to independent Claim 21, and the rejection of dependent Claims 24 and 33 as being anticipated by the Danylewych-May reference should also be withdrawn.

Patentability of Independent Claim 47

A significant difference exists between the recited subject matter and the cited art because the cited art does not teach measuring a biological signature while the particles remain deposited on the regenerable solid collection surface.

More specifically, the second step of independent Claim 47 recites (emphasis added):
subsequently, measuring a biological signature present in the particles comprising the spot, using a detector configured for sensing the biological signature of the particles, while the particles remain deposited on the regenerable solid collection surface

As noted above, the sample in Danylewych-May *is not* analyzed while on the collection surface. Accordingly, the rejection of independent Claim 47 as being anticipated by the Danylewych-May reference should be withdrawn.

Patentability of New Claim 48

Claim 48 is based on Claim 1, and further recites that the means for regenerating the regenerable solid collection surface by removing particles from the regenerable solid collection surface does so without removing the regenerable solid collection surface from the air sensor device. In contrast, the Danylewych-May reference teaches that the substrate 45 is removed from the sample collection device and inserted into the desorption stage of an analyzer (column 6, lines 23-28).

Conclusion

Accordingly, all of the claims now submitted define patentable subject matter that is neither anticipated nor obvious in view of the prior art cited. The Examiner is thus requested to pass the present patent application to issue in view of the amendments and the remarks submitted above. If there are any questions that might be addressed by a second telephone interview, the Examiner is invited to telephone the undersigned attorney, at the number listed below.

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